

IN THE CLAIMS:

1. (currently amended) A method for operating a gas turbine engine, said method comprising:

positioning a noise suppression system comprising a manifold and a plurality of tubes within the gas turbine engine such that the plurality of tubes are coupled azimuthally around an outer periphery of a nozzle;

coupling one end of each of the plurality of tubes to ~~[[a]]~~ the manifold and coupling an opposite end of each of the plurality of tubes to the nozzle such that the plurality of tubes each extend away from the manifold;

~~orienting the plurality of tubes such that air discharged from the plurality of tubes forms a vortex;~~

channeling compressed air from the gas turbine engine to ~~[[a]]~~ the noise suppression system through the manifold; ~~[[and]]~~

selectively operating the noise suppression system such that compressed air is distributed substantially uniformly among the plurality of tubes and is discharged from the ~~noise suppression system~~ plurality of tubes generating a flow control mechanism in a gas turbine exhaust flowpath~~[[.]]~~; and

orienting the plurality of tubes such that air discharged from the plurality of tubes forms a vortex.

2. (currently amended) A method in accordance with Claim 1 wherein selectively operating the noise suppression system further comprises selectively operating the noise suppression system such that air discharged from the ~~noise suppression system~~ plurality of tubes facilitates reducing gas turbine noise generated during engine operation.

3. (previously presented) A method in accordance with Claim 1 wherein channeling compressed air from the gas turbine engine to the noise suppression system further comprises:

channeling compressed air from the gas turbine engine into the manifold; and

discharging air from the manifold into a core engine exhaust stream through the plurality of tubes.

4. (original) A method in accordance with Claim 3 wherein the noise suppression system includes an actuation valve, wherein channeling compressed air from the gas turbine engine to a noise suppression system further comprises selectively operating the actuation valve to channel compressed air from the gas turbine engine to the manifold.

5. (previously presented) A method in accordance with Claim 3, wherein the plurality of tubes includes a plurality of pairs of tubes, each pair including a first tube and a second tube, wherein discharging air from the manifold further comprises orienting the first tube and the second tube such that air discharged from the plurality of pairs of tubes generates a vortex in the gas turbine exhaust flowpath.

6. (original) A method in accordance with Claim 3 wherein said discharging air from the manifold further comprises discharging air from the manifold into a core gas turbine engine nozzle exhaust flowpath.

7. (previously presented) A method in accordance with Claim 3 wherein said discharging air from the manifold further comprises discharging air from the manifold into a fan nozzle exhaust flowpath.

8. (currently amended) An assembly for a gas turbine engine, said assembly comprising:

a gas turbine nozzle; and

a noise suppression system coupled to said gas turbine nozzle, said noise suppression system comprising a manifold and a plurality of tubes, said plurality of tubes are azimuthally coupled to said gas turbine nozzle and a plurality of azimuthally arranged tubes, each of said plurality of tubes comprises a first end coupled to said manifold and a second end coupled to said gas turbine nozzle such that said plurality of tubes each extend away from said manifold[[,]] and are oriented such that air discharged from said plurality of tubes forms a vortex, said noise suppression system is selectively operable to facilitate generating a plurality of flow control mechanisms such that compressed air channeled through said manifold is distributed substantially uniformly among said plurality of tubes in said gas turbine nozzle flowpath.

9. (previously presented) An assembly in accordance with Claim 8 wherein said noise suppression system further comprises:

an upstream end of said plurality of azimuthally arranged tubes coupled to said manifold and a downstream end of said plurality of azimuthally arranged tubes coupled to said gas turbine nozzle, said plurality of tubes are oriented such that air discharged from said plurality of tubes forms a vortex.

10. (original) An assembly in accordance with Claim 9 wherein said plurality of tubes comprise at least a first tube that extends radially inward at an angle γ with respect to a centerline axis, and a second tube that extends radially inward at the angle γ with respect to the centerline axis, said first tube and said second tube separated by an angle γ .

11. (previously presented) An assembly in accordance with Claim 9 wherein said plurality of tubes are oriented to facilitate generating the vortex in a core gas turbine engine nozzle flowpath.

12. (previously presented) An assembly in accordance with Claim 9 wherein said plurality of tubes are oriented to facilitate generating the vortex in a fan nozzle flowpath.

13. (previously presented) An assembly in accordance with Claim 8 wherein said noise suppression system further comprises:

a plurality of pairs of tubes, each pair comprising a first tube and a second tube, said plurality of tube pairs coupled to said manifold, each said tube pair is selectively oriented to facilitate generating a vortex in said gas turbine nozzle flowpath.

14. (original) An assembly in accordance with Claim 8 wherein said noise suppression system further comprises an actuation valve selectively operable to discharge compressed air from said gas turbine engine to said noise suppression system.

15. (currently amended) A gas turbine engine comprising:

~~a core engine nozzle;~~

~~a fan nozzle coupled upstream from said core engine nozzle~~ a gas turbine nozzle; and

a noise suppression system comprising a manifold and a plurality of tubes, said plurality of tubes are azimuthally coupled to said ~~core engine~~ gas turbine nozzle and a plurality of azimuthally arranged tubes, each of said plurality of tubes comprises an upstream end coupled to said manifold and a downstream end coupled to said gas turbine nozzle, said plurality of tubes each extend away from said manifold, and are oriented such that air discharged from said plurality of tubes forms a vortex, said noise suppression system is selectively operable to facilitate generating a plurality of flow control mechanisms in said core engine nozzle flowpath.

16. (previously presented) A gas turbine in accordance with Claim 15 wherein said noise suppression system further comprises:

the manifold coupled to at least one of said core engine nozzle and said fan nozzle; and

a plurality of tube pairs coupled to said manifold and are selectively oriented to facilitate generating the vortex in at least one of said core engine nozzle exhaust flowpath and fan nozzle exhaust flowpath.

17. (original) A gas turbine in accordance with Claim 16 wherein each of said plurality of tube pairs comprises:

a first tube that extends radially inward at an angle γ with respect to a centerline axis

a second tube that extends radially inward at the angle γ with respect to the centerline axis, said first tube and said second tube separated by an angle γ .

18. (previously presented) A gas turbine in accordance with Claim 15 wherein air is distributed substantially uniformly among said plurality of tubes.

19. (previously presented) A gas turbine in accordance with Claim 16 wherein said noise suppression system further comprises:

the manifold coupled to said gas turbine nozzle; and

exactly eight tube pairs coupled to said manifold, each of said eight tube pairs are selectively oriented to facilitate generating the vortex in said gas turbine nozzle flowpath.

20. (original) A gas turbine in accordance with Claim 15 wherein said noise suppression system further comprises an actuation valve selectively operable to discharge air from said gas turbine engine into said noise suppression system during at least one of a continuous operation mode and a pulsed operation mode of said noise suppression system.